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Understanding the Importance of “Patient’s Choice” in the Early Environmental Justice Activism of the Karen of Klity Creek (Thailand)

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During the latter half of the twentieth century the small Karen community of Klity Creek (Thailand) suffered from industrial lead pollution. With the help of an NGO, members of the community started a civic campaign demanding environmental justice and raised public awareness about their exposure to lead pollution. The Thai Ministry of Public Health offered them medical treatment, but they rejected it. Instead, the patients/activists requested another form of treatment (chelation therapy). When this was not forthcoming, the patients began a public campaign demanding their treatment of choice and maintaining that it should be provided to all villagers contaminated with lead. Using detailed descriptions of events, this paper explores the Karen community’s civic activism demanding their treatment of choice.

Keywords: environmental illness/justice, lead pollution, indigenous activism, Karen of Thailand

During the last decades of the twentieth century the issue of environmental justice became a global one, particularly when related to environmental illness caused by industrial pollution. Much has been written over the past 30 years on environmental illness and justice concerns in Western societies (Bryant 1995; Kroll-Smith and Floyd 1997; Kroll-Smith *et al.* 2000; Schwarze 2003; Auyero and Swistun 2007; Brown 2007; Schroeder *et al.* 2008; Schlosberg and Carruthers 2010; Brown *et al.* 2012; Balme 2014) as well as indigenous native societies of the northern hemisphere (see Shkilnyk 1985; Roe 2003; Kafarowski 2006; Hoover *et al.* 2012; Tester *et al.* 2012; see also Kirsch 2001). However, rarely have there been any studies on similar issues in Southeast Asia.

Studies on industrial pollution have shown that there is a tendency for industrial sites to be placed in places of least resistance and with no deliberation with members of

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the community (Loh and Sugerman-Brozan 2002, 112; Pederson 2010, 26). Over time the local community gets locked into a structure of what R. Nixon (2011) calls “a slow violence” that not only degrades their environment but also affects their physical well-being as well as social and cultural values. This form of structural violence¹⁾ can also be perpetuated by other social factors. An ongoing dis-acknowledgement or disinterest from the greater society, as well as denials and deceptions about the effects of industry on a population, all prolong suffering as they also hinder the community’s ability to obtain justice.

In response, communities protest the activities of industry and demand justice for the harm it causes to people’s health through its degradation of the environment. Such protests and demands can be made within different political and ideological settings, but it is not necessary for communities to put the “environmental justice” label to their activism (Carruthers 2007; Elvers *et al.* 2008; Schroeder *et al.* 2008, 548). Nevertheless these protests and contestations tend to take on very similar forms around the world. According to P. Brown (2000, 367), environmental illness activism follows eight general procedures:

1. A group of people in a contaminated community first notice the effects of pollutants in their environment.
2. These residents hypothesize something out of the ordinary in relation to health effects and pollutants.
3. Community residents come to share a common interest in the issue.
4. Community residents, now a cohesive group, read about and/or ask around and talk to government officials about the contaminants and their health effects.
5. Residents organize groups to pursue their investigation.
6. Government agencies conduct official studies in response to pressure from community groups.
7. Community groups engage in litigation and confrontation.
8. Community groups seek corroboration of findings by experts.

Tribal and indigenous peoples can—and in many cases have—suffered from this form of structural violence. Indigenous (tribal) communities who suffer environmental degradation wrought by industrial pollution experience this as total community degradation, which not only affects their health and reproductive capabilities but also degrades their

1) Structural violence degrades the community’s total well-being through loss of physical health and intellectual and cultural development, and it prevents the members of a community from achieving their fullest human potential (Galtung 1969; Farmer 2009).

customs, values, and norms which are embedded in the environment and by which they survive as a community (Roe 2003; Schlosberg and Carruthers 2010; Hoover *et al.* 2012). For such communities, whose members have no control over the decisions made by government but nevertheless have to suffer the consequences (Kafarowski 2006), the importance of place as well as the broken relationship in the interdependence of individuals and community is brought to the fore (Groves 2015, 854). Illness, particularly environmental illness, can—and does—also imply socioeconomic and cultural distress that needs to be remedied.

In most cases, particularly in Southeast Asia, the ability of indigenous and marginal communities to mobilize and seek remedies by gaining access to the legal courts against environmental injustices they have experienced is dependent on engaging with civil society and establishing a relationship with NGOs (Bakker and Timmer 2014; Rosser and Curnow 2014). Such groups become dependent on the concerns of civil society, the space existing between the state and the individual or household. This space consists of voluntary associations of people from different social and ideological backgrounds coming together around a social issue of concern (Gellner 1994; Guan 2004). Such issue-focused associations involve one person or more, a sudden aggregation of individuals, or well-established organizations. For civil society to be viable, people have to have a common language of communication to discourse and some shared common goods to frame and mediate it. But in the indigenous people’s civic context, in which people might speak a different language and whose concerns might follow different norms, the civil-societal space is not necessarily between the state and the household but between the state and the community. Civil society may be considered part of the external sources of power that caused the damage and destruction in the first place. Nevertheless, it is through civil society that indigenous and marginal communities can gain access to the courts of justice as well as amass hard scientific and medical evidence for their cause.

Environmental justice activists also try to enroll the support of science (and medicine) in their demand for public recognition that they have been wronged. Gaining scientific (medical) recognition of pollution and its damage to people’s health is fraught with political difficulties (Brown 2000; Boudia and Jas 2014). Whereas medicine claims neutrality, civic activism asks for physicians to take sides, and failure to gain their confirmatory support can force the environmental health activists into a public showdown (Brown and Kirwen-Kelly 2000, 46). Civic activism can challenge scientific claims to neutrality, which can sometimes be shown to be a political action that at best maintains the status quo (*ibid.*; Kroll-Smith *et al.* 2000). Environmental justice protests can reveal how the clinical “glance” of a “knowing medical objectivity,” and the decisions based on this glance, can be unsuspectingly supportive of the structures of power that caused

damage to the activists' health (Foucault 1977). These structures of power and the medical claim to neutrality can prove to be an obstruction to people seeking justice, who need scientific and medical evidence to prove their claims.

One important issue in health studies and practice during the latter half of the twentieth century has been the recognition of a need for a patient-centered and shared decision-making treatment as well as the patient's right to choose the type of treatment they require. These issues have been translated into policy and health acts in many countries (Haynes *et al.* 2002; Padgett 2003; Mol 2008; Coulter 2010). The drafting of the national health act in 2003 and its subsequent implementation in 2007 were based in part on advances in this line of clinical development (Komatra 2008). The right of "patient's choice" to access appropriate specialists and treatment also has its bearings on environmental justice claims and the legal success of seekers of justice (Swoboda 2008, 473). As biomedicine is constituted of myriad specialties within its scientific frame, different medical specialists can provide differing diagnoses and treatments that prove to be more or less suitable to the needs of environmental-justice seeking patients. For patients, seeking a particular medical specialist or choosing a particular treatment is more than simply gaining a cure. It is about gaining a diagnostic recognition of the cause of the illness. And this diagnosis can be used as medically recognized evidence that an injustice has taken place. In such a situation, the patient's choice of treatment becomes something more than a health concern; it is an evidential concern over the type of justice sought.

From the turn of the millennium until 2016 a group of Karen villagers from Klity Creek (Kanchanaburi Province, Thailand) were caught up in an environmental justice protest against a lead-producing company that operated north of their village during the late twentieth century. They were then led into a public contestation with the Thai Ministry of Public Health (MOPH) over the medical interpretation of their illnesses and deaths and the treatment given to them. From 2003 they were embroiled in court litigation against the lead-producing company and subsequently against the Ministry of Pollution Control (MPC). In each of the litigations the Thai courts of justice ruled in favor of the villagers so that not only were the villagers compensated for the toxic contamination of their life-sustaining stream and its effects on their health, but it was also later ruled that their stream should be cleaned up by the MPC. But the road to justice has been a difficult one for the villagers, especially during the initial years when they had to gain confirmation that their illnesses were related to their lead-polluted bodies.

In this paper we would like to present and examine the initial years of protest when the Karen of Klity Creek first demanded and then protested their right to choose and receive their preferred treatment from the MOPH. The treatment they publicly demanded was one that recognized the connection of their illnesses with their lead-

contaminated blood. In so doing they were demanding that the MOPH acknowledged the illnesses and deaths in the community as being related to their environment’s pollution by the lead-mining activities in the area. It was at this point that each individual’s role as a patient converged with their participatory role as civic activists demanding environmental justice.

The Karen Community of Klity Creek

In the past, Tai-speaking peoples (of whom the Thai are one group) viewed the Karen as a *kha* or serf people (Buergin 2003). Upland communities who attached themselves to a local lord were given permission to live in adjacent mountainous areas in return for certain tributary and ritual services (Hinton 1983). In the modern Thai imagination, the Kariang (Karen) are ideologically perceived to be a somewhat quaint community within the Thai geo-body of the nation (Thongchai 2000; Pinkaew 2003). Since the 1960s, Thai governments have taken a paternalistic approach to them and have seen it as the state’s responsibility to help in their development and integrate them into the nation (Chayan 2005). In relation to Thai communities, the development of the Karen communities is uneven. Whereas elders may not be able to speak the national language, younger people are more Thai in their outlook due to state education and migration to towns for work as well as exposure to the Thai public media.

The Karen community of Klity Creek was established in 1897 in part of an area that would in the 1960s be designated as the Thung Yai Naresuan Wildlife Sanctuary and later be awarded the title of a UNESCO World Heritage Site. There are two Karen villages in Klity Creek, the upstream settlement and the downstream settlement. The upstream settlement, situated 10 kilometers north of the mine, was unaffected by the mine’s activities; the affected community was the downstream settlement. By the turn of the millennium there were 269 residents and 53 households in the lower part of Klity Creek. The village is 200 kilometers northwest of Bangkok.

Until the 1960s the Karen households of Klity Creek were relatively self-sufficient. Their economies were based on dry (rotational) rice and cassava farming. They used the forest and its waterways for food as well as basic necessities of life. From the 1970s Karen villagers became less mobile as their original economy started to change. During the mid-1970s some villagers started building their houses with plain wood instead of bamboo, and this change reflected the effects of state development on them. The new houses were more permanent and hindered the villagers’ mobility, which was necessary for their rotational cultivation. Then they began cultivating rice for their own consump-

tion as well as chilies, potatoes, pumpkins, and beans. The villagers sometimes hunted animals from the forest for food and gathered fish from the stream. They also reared buffalo. Other food commodities such as salt, shrimp paste, and fish were either bought in the village market or obtained through barter with other villagers or miners.

At the beginning of the millennium there was government pressure for households to restrict their rotational farming practices. During this period a concerned merchant introduced corn farming to the villagers. A few families took up the offer and started to grow corn as a cash crop even though they had no prior experience. The turn to cash-crop farming gave them an income that could somewhat compensate for the loss of riverine produce that was now contaminated with lead.

Klity Creek: An Area Rich in Lead Minerals

The area where this Karen group live is rich in lead and other minerals; this was already known in the nineteenth century. Older Karen speak of the presence of gold, silver, and lead ore in the Kala mountain range, which was mined in the more distant past.

It is conceivable that a reason why the ancestors of these Karen families were originally given permission to settle in this location was to help with the extraction of minerals from the hills. It is recorded that during the earlier half of the twentieth century the Karen of the area did send lead minerals as tribute to the royal central government (Fine Arts Department 1972). According to Karen lore, the minerals are owned by a spirit that only good men can see. Legend has it that Mong Ploy took a trip to the Kala mountain range and succeeded in finding those minerals. He offered them to a wealthy Chinese merchant in exchange for 30 buckets of banknotes. The price was too high for the merchant, so Mong Ploy left the minerals in the hills. After Mong Ploy died, local Karen sought the minerals but never found them. The Karen explained that the spirit owner protected the minerals for the good of the common people.

Elderly Karen are familiar with the use of lead ore as a natural item in their environment. They call it “raw betel nut” (*rae sisa*), as the clod of earth mixed with it was usually the size of this nut. Sometimes during the rainy season villagers would collect these “raw betel nuts” that they found in the streams, smelt the lead from the soil, and mix it with bat droppings to make ammunition for their hunting guns. They also used the lead as floats for fishing lines. They occasionally also collected large pieces of lead ore and sold them to Karen from Burma. One villager even made money selling lead to a monk for molding a Buddha image. Thus, not only did the Karen here develop legends relating to their lead-rich environment, but the metal might have had a role in their community’s

economy in earlier days.

In 1912 a government survey was conducted to search for mineral sources in the area. Geological studies reported that Kanchanaburi Province held the most lucrative lead resources in the kingdom. The mineral sources found in the area were either carbonated or sulfite lead ore, and it was estimated that mining here could produce this metal for at least 100 years. It was reported that there were two potential lead-resource areas: Song Thor/Bor Yai/Bor Noi and Bor Ngam/Ongkha. Although zinc could also be found in the same strata deposit, the industrial focus was mainly on lead production. Kanchanaburi Province thus became one of the main provinces for lead production in Thailand.

Shortly after the survey a German explorer founded Bor Yai Mining (Nongpai), but production was put on hold during World War I and resumed only in the 1940s. In 1949 the United Mineral Company of the United States took over the Bor Yai mine and produced minerals at 100 tons per month. The company contracted P . . . K . . . of Pring & Brothers Company Limited to manage the mine for three years. P . . . K . . . surveyed for new mineral sources and established other mines in the area: the Song Thor, Bor Ngam, Bor Noi, and Nan Yang mines. Local Karen were employed as scouts to help inspect other areas with black lead deposits. On finding another large mineral source, P . . . K . . . decided to sublease the concession from the mining organization in April 1951. The company changed its name to Pol & Son Company Limited and was placed under the management of P . . . K . . . 's younger brother.

From 1952 to 1955, the mining operation did not use machinery but employed 100 miners who extracted the lead with only hammers, levers, hoes, and clamshell-shaped baskets. This method could produce lead mineral at 1,000–2,000 tons per year. As world prices for lead fell during the 1950s, the company had to find new and more cost-effective ways of production. A study by the Academic Division of the Mining Department of Thailand determined that the flotation method of production was the most cost-efficient method to produce purified lead (San 1961, 16–23). The company that entered the area of Klity Creek built the first modern floating lead mine in Thailand. This mine was located between the two Karen settlements and utilized the stream for cost-effective production.

The owners of the mine, the K . . . family, were publicly well known. The last director was the subdistrict headman as well as a representative of the Democrat Party in the province. He was also a member of numerous committees of Thailand's main lead-mining companies. Even local Karen looked up to the head owner, respectfully calling him *kamnan* (headman) or *taokae* (big boss).

The mine brought development to the area, such as a grocery store, medical and health facilities, and improved transport and communication services to and from the

region. Villagers sold forest products to the miners, although they did not work for the mine because it did not fit in with the time management of their own economy. The mining company donated large sums of money to the village health service and the temple in the upstream Karen settlement. It also invited Karen villagers to its New Year parties and other social gatherings. Throughout the period the company maintained good relations with the upstream community, and the latter were not disturbed by its activities. At the same time as the mining company was carrying out its benevolent and meritorious deeds, the floating mine was harming the lives of downstream Karen by mismanaging the discharge of toxic waste into the stream during the rainy season and through its negligence gave the community decades of misery and suffering.

Making Environmental Pollution a Public Issue

Villagers claim that it was in the mid-1970s that they first noticed the bad smell emanating from a stream that now was muddier and murkier in color. Fish and other riverine creatures were also frequently seen floating dead on the water's surface. By the mid-1990s buffalo and ducks were showing strange symptoms and dying.

Villagers from the downstream village also began complaining of health symptoms that they claimed they had never experienced before. Itchy rashes, headaches, fever, dizziness, diarrhea, conjunctivitis, and pain in the limbs were now common.²⁾ A number of women went blind, and children began suffering from stomachache, asthma, and upper respiratory problems. Some children were born with health complications or physical deformities. There were also deaths preceded by physical symptoms that elders claimed they had never seen before. People became depressed and apathetic. Women would sometimes break down and cry. Some individuals claimed to suffer from insomnia and others from memory loss. The Karen had to get the word out, but until the mid-1990s nobody was interested.

In 1995 the director of the Karen Studies and Development Centre, an NGO concerned with Thai-Karen affairs and culture, visited the village of Klity Creek and met

2) Mild symptoms of lead pollution are fatigue, sleeplessness and pallor, loss of appetite, irritability, and malaise. Other symptoms include weakness, abdominal pain, constipation, clumsiness and extreme dizziness, paralysis of limbs, convulsions, and swelling of the brain (lead encephalopathy) (Warren 2000, 14). Prolonged exposure to lead poisoning can lead to significant neurological damage, convulsions, coma, and death (Anthamten and Hazen 2011, 65). Lead exposure in children is associated with reduced verbal competence, lowered attention span, and lowered IQ (Cohen and Amon 2012, 75). High-level childhood lead poisoning can lead to encephalopathy and even death (Berney 2000, 249).

villagers suffering from industrial pollution. He took up their environmental and medical complaints that were falling on deaf ears and raised public awareness about their condition. He started a letter campaign for them, and through the media the NGO disseminated their predicament to intellectuals, students, and other environmental activists. The NGO gave the villagers a Thai public voice to cross over social boundaries and to express their grievances and seek environmental justice. The complaints of the Karen of Klity Creek were suddenly brought into the public spotlight as an example of innocent victims of industrial environmental degradation.

The Karen of Klity Creek came before the public eye during a period when Thailand was developing a more democratically aware and civically engaged society. Many Thais from educated middle-class backgrounds as well as liberals active in Thailand's democracy movement were civically engaging upland-dwelling peoples and Karen groups during this period (Gillooly 2004, 123). Marginal groups were now able to express their grievances through concerned and active NGOs who were finding common causes with them (Forsyth 1999; 2004; Buergin 2003; Gillooly 2004; Jonsson 2005, 129). The new political conditions from the 1990s onward allowed many Thais to be guided by a multi-social model of Thai society and not the conventional monolithic ethno-nation that characterized the national ideology for much of the middle part of the twentieth century. The vibrant activism in Thailand generated a concerned civil society that was extending environmental and health citizenry to non-Thai-speaking upland-dwelling communities within the kingdom. Karen communities particularly benefited from what A. Walker (2001) calls "the Karen consensus." This consensus portrayed the Karen uplanders as an idyllic community and an "environmentally friendly tribe." The "consensus" originally developed by Karen elders themselves has served the Karen in gaining the support of environmental activists against more powerful forces (Yos 2004).

During the 1990s Thailand entered into the community of environmentally concerned nations by signing the Environmental Protection Act of 1992 and incorporating environmental issues in its five-year development plans. Another debate at the time was a civic call for reforms in public health to create a health system that focused on the people's need and their participation in decision making (Komatra 2008). There was a growing demand for greater dialogue and deliberation between health agencies and the public concerning health care and treatment. Health agencies were encouraged to engage in dialogue and consultation with the public so that a consensus could be reached on what was good for the individual as well as for collective health (*ibid.*, 18). This call culminated in the drafting of the national health act in 2003 and its implementation in 2007.

Thailand also entered into another frame of global environmental health concerns that gained force in the United States from the 1960s. At the end of the twentieth century

environmental health activists in the United States challenged the industry's conception of lead as being a "useful metal" and now redefined it as the "mother of all industrial pollution" (Auyero and Swistun 2007, 134). In the United States lead pollution was characterized as a national epidemic and its symptoms "a disease of our creation" (Berney 2000, 240; Warren 2000, 7; Widener 2000, 259). Civic rights activists took it up as a symbol of all that was wrong in US society. Its prevalence came to symbolize the callousness of a health-care system that was ridden with discriminatory class and race relations and that was seen as providing poor community services to lower-income and radicalized neighborhoods. The fight to end lead poisoning became part of a complete reshaping of the definitions of acceptable risk and wellness in society and of how society should view its duties to the poor (Warren 2000, 29). By the late 1980s and early 1990s these environmental health developments reached Thailand, where the effect of lead and other substances on the environment and on human health became an issue of concern for environmentalists and human rights activists following a number of sudden deaths that were allegedly linked to pollutants in factories (Forsyth 1999; 2004). Industrial substance contamination, particularly lead contamination, became a symbol of authoritative power relations and decision making that did not take local people into account. In this vibrant and highly engaging civic model the Klity Creek problem was not just a Karen problem but was redefined as a problem that exemplified general failings within the greater Thai society.

Rejecting the Treatment Offered and Exercising Patient's Choice of Treatment within the Environmental Justice Protest Frame

After public awareness was raised about the pollution at Klity Creek, the area was examined for lead contaminants. Official reports confirmed that the lead level was high around the mine and the stream just south of it. The mine was officially closed down in 1998. Two boulders were placed in the stream to form a dam to prevent the water from bringing more lead contaminants downstream. It was assumed that the stream would recover over time, although no consideration was given to how this period of natural remediation would prolong the villagers' suffering.

In 1999 a health team was sent out to the village to take the first blood samples (Krungthep Turakit, February 10, 1999). The results of the blood tests found that all of the children below the age of six had a blood lead level (BLL) higher than 10 µg/dl (micrograms of lead in a tenth of a liter of blood), and the adults' BLL was between 30 and 50 µg/dl. In March 2000 a second round of blood tests was conducted, and this showed

slightly higher results. The intervention threshold was put at 25 µg/dl for children and 50–60 µg/dl for adults, which would have been cause for alarm and would have invited immediate intervention in the United States, where the lead threshold level around the same time was 10 µg/dl.³⁾ The provincial health service concluded that the symptoms that villagers were suffering from were caused by general diseases and had nothing to do with lead pollution (Matichon, July 6, 1999). The treatment the MOPH was willing to provide at this stage was free blood surveillance and health advice. A health team would be sent annually to the village to test villagers’ blood and advise on how residents could adjust their behavior in terms of water consumption and hygiene.

The MOPH did not consider that the villagers’ ailments were correlated with lead contamination. Neither did it consider that many villagers were suffering from long-term exposure. Accordingly, it provided them with treatment that would be given to people suffering from milder symptoms on an outpatient basis (Warren 2000, 14). The logic behind this intervention was that as the mine was now closed and the villagers had other means of obtaining water, the lead levels in their blood would naturally go down with time.

The supportive NGO (and the villagers) was concerned that this treatment did not take into consideration the various properties of lead as a contaminant in relation to the villagers’ experience. Lead is an accumulative poison and through prolonged exposure can remain in hard tissue such as bone (Widener 2000, 266). This accumulated lead can leach back into the blood at any time and destroy the white blood-cell life expectancy (Warren 2000, 16). The NGO was concerned that the villagers had been exposed to lead for 20 years and many children had been born in the community during this period. It claimed that the MOPH should consider them to be chronic sufferers and therefore chelation therapy was necessary.

The MOPH was reluctant to provide chelating drugs. These drugs, which attract heavy metals and minerals in the blood and excrete them through the urine, are usually administered when the patient has a very high BLL. The threshold level for chelation therapy intervention varies in different countries and has also been a point of contention between the lead-mining industry and environmental health activists. In addition, the drug must be administered under careful supervision because it can cause a temporary rise in BLL before its reduction and the patient can suffer from side effects. This was one of the main reasons the MOPH was reluctant to administer the drug to villagers.

The villagers, who were expecting a cure, noticed that they were still only receiving

3) Since then it has been further reduced in the United States to 5 µg/dl. Different countries vary on this.

analgesic drugs for their ailments. Frustrated, most of those who participated in the first blood test began to lose interest and stopped cooperating with health personnel after they learned that the medical team was not going to dispense the desired medical treatment. The number of villagers presenting themselves to the medical team gradually dwindled from 119 in the first test to less than 50 in later tests. There were also cultural issues involved. The health team did not take into consideration that drawing blood could have certain symbolic overtones for a forest-based “tribal” minority community.

The villagers and the NGO demanded that the Public Health Department provide pharmacological intervention to all the villagers and particularly to the children. The NGO pointed out that the villagers had been exposed for over 20 years and many individuals had been born into the community during this period. Under public pressure the Ministry of Health decided to send a medical team to visit the downstream Klity village on October 6, 2000 to examine the children’s development and nutritional status. The team then designated a group of 41 children below the age of six as being high-risk sufferers and arranged for them to receive treatment at the provincial hospital. In so doing, the MOPH excluded the rest of the village from direct intervention on the grounds that they were not high-risk sufferers.

At first only five children were actually admitted. Later another 15 were admitted. Most were not given chelation therapy but only had their blood levels checked. Part of the funding for the children’s trip was provided by the lead company, which wanted to present a concerned and apologetic image before the public.

In response, the supportive NGO selected eight individuals to visit the Occupational Medicine and Environment Institute of R . . . Hospital in Bangkok, which was the only one of its kind dealing with environmental pollution. Those selected were both adults and children who had high blood lead levels but who were not designated as high-risk sufferers by the medical team.

In Bangkok the eight patients were placed under the care of a US-educated doctor (Forsyth 2004). Using a no-threshold policy, one that conformed to the international health policy of the Agency for Toxic Substances and Disease Registry, this doctor revealed that the eight patients had a high BLL and six of them were suffering from chronic lead pollution. The doctor placed the eight under careful chelation therapy for five days. A few months after their return to the village, the eight claimed to feel better and cured of their ailments. The treatment confirmed the villagers’ own understanding of their exposure experience. The villagers wanted to be cleansed of the poison that was afflicting them and affecting their health and daily existence. At this point, chelating drugs for all villagers became the treatment of choice.

Entering the Environmental Justice Frame

In September 2000, just prior to the medical team’s visit in which they selected a group of children as high risk, the supporting NGO brought a number of villagers to a conference held by another NGO calling itself the Network for Solving the Health and Environmental Problems Caused by Lead Poisoning in the Upper Mekong River. The seminar introduced the Karen villagers to the “environmental justice frame” (Čapek 1993). As Stella Čapek (*ibid.*, 7) stresses, the environmental justice frame is based on the concept of rights and is related to the social justice and civil rights movement. It provides a master frame that validates the struggle for rights of various disenfranchised groups. In this frame of action antitoxin activists who see themselves as having been disenfranchised can claim full rights from the wider community, a respectful public treatment, legal protection, and compensation.

The Karen village representatives who participated in the conference left the seminar with a six-point proposal to the government:

1. The government should urgently treat all of the villagers who were showing abnormal symptoms.
2. The government should reduce the blood lead levels of all the villagers and not just a risk group.
3. The treatment should encompass the whole community and not just individuals.
4. Medical research should be conducted on the villagers’ illnesses.
5. The government should put up billboards warning the villagers about contamination.
6. The government should set up a fund for treatment that could employ medical specialists to provide the villagers with appropriate medical treatment.

In this environmental justice frame the villagers’ diverse symptoms were redefined in terms of “environmental illnesses” caused by industry. The villagers demanded total pharmacological intervention as their right to health. The media disseminated the proposal to the wider society, and the Karen of Klity Creek were soon supported by members of an empathetic Thai public.

After the eight villagers who had been treated in Bangkok returned to the village and claimed to have recovered, the supporting NGO started a letter campaign demanding chelation therapy. They wrote to the MOPH stating that the eight villagers who had visited Bangkok were there because they had been diagnosed as high risk and had been given chelation therapy. The letters stressed that the patients had recovered from their illnesses following the treatment they had received. The letters requested the same

treatment for all the villagers poisoned by lead.

The MOPH continued ignoring the requests. The initial response from the then minister of public health was that there was no budget to support chelating agents for all the villagers and they would have to wait for them to be imported. In turn, the representative of the NGO, who had arranged for the eight villagers to make the trip to the hospital in Bangkok, mockingly challenged the MOPH by suggesting that it should borrow the medicine from the Occupational Medicine and Environment Institute in Bangkok, the very institute that had been established to deal with such health matters (*The Nation*, March 16, 2001).

After four villagers died between December 2000 and March 2001, the MOPH was again placed under public pressure. NGOs with the help of the media were now adopting the moral tactic common in environmental justice protests of suggesting murder by pollution (Freudenberg and Golub 1987, 389). The deaths were being connected to lead poisoning caused by industrial environmental degradation, and the question was publicly raised as to why the MOPH was not doing anything to help the villagers (*Bangkok Post*, December 19, 2000). This compelled the MOPH to respond by organizing a seminar in April. Medical experts reviewed the cause of death of the four individuals and concluded that they had died due to naturally occurring diseases and not due to lead exposure.

The supporting NGO and the villagers rejected the seminar's announcements. In response, they started writing letters addressed to the Thai public about their predicament. The villagers also placed a placard in front of their village denouncing the medical doctors as allegedly having shares in the lead company and therefore blocking appropriate treatment. The protest and demand for the treatment and drug of choice along with the media attention put pressure on the MOPH, which shortly afterward dispensed the drug D-Penicillamine to the villagers via the director of the supporting NGO, but without medical supervision. In so doing, it retained its position that the illnesses the villagers were experiencing were not related to their contaminated bodies. The number of pills given was limited, and there were insufficient courses of medication for all the families. The villagers now had the drug they wanted, but there was no one to supervise their administration. The provincial health service was also forced to reveal the results of the test. It became apparent that there were some irregularities on the result sheets, which for the villagers only confirmed that the health agencies did not take their health predicament seriously.

Taking the Case to Court

The villagers’ participation in the lead pollution seminar also redirected their protest in other ways. During the seminar one notable speaker proposed that the villagers and the Law Society of Thailand should file a legal suit against Lead Concentrates (Thailand). His suggestion was promptly taken up, and between the years 2003 and 2016 the villagers filed lawsuits against the lead company and later against the Ministry of Pollution Control. In every lawsuit the judges ruled in the villagers’ favor.

At first, the plaintiffs who took up legal action in 2003 were eight villagers. The villagers were prosecuting Lead Concentrates as the first defendant and K . . . K . . . as the second defendant for transgressing the terms of the Environmental Protection Act of 1992. The claim sought compensation for the eight villagers and for the company to clean up the polluted stream in the downstream Klity village. Medical evidence was provided to prove that the villagers were chronic sufferers from lead pollution. The success of the first group of villagers gave courage to the rest of the village, and a second group of 151 villagers filed a civil suit against Lead Concentrates for violating the Environmental Protection Act of 1992.

The villagers, however, were dismayed to lose their claim demanding that the lead company clean the stream. For the villagers, the community’s well-being was dependent on the remediation of the environment, which would allow their cultural existence to regain a sense of normalcy. The villagers’ primary aim, then, in seeking justice was the restoration of the creek, which in turn would remedy their relationship with their environment.

In 2005, after the first group had won their court case against the mining company, 22 villagers decided to sue the Ministry of Pollution Control for negligence. In late 2008 the judge ruled against the MPC in the villagers’ favor. The MPC was accused of negligence in failing to protect the right of the villagers to live in a healthy environment (*The Nation*, May 7 2009). This was the first time that a government agency was considered liable under the 1992 Environmental Protection Act (*The Nation*, December 2007). The court also ordered the MPC to rehabilitate the environment and write up a rehabilitation plan and send it in to the judiciary board before a certain date.

The Problem with the MOPH’s Treatment

When the villagers requested that they receive the treatment that had been given to the eight recovered villagers in Bangkok, they were exercising the right of a patient to choose

the treatment they wanted. The Karen villagers' request for chelating drugs was based not just on anxiety over their health but the need for recognition that their health was severely damaged by the lead mine. Further, the damage not only affected their health but their way of life as well. Medical doctors and specialists approached the villagers' lead poisoning and illnesses through epidemiological statistics. This approach limited their understanding of the villagers' health predicament to numbers, and their bodies were treated mechanically. According to A. Barry and C. Yail (2002, 42), medical surveillance places the weight of uncertainty on the patient, and it is expected that each patient will regulate their own behavior to counter the illness. The MOPH health team's medical analyses showed that the villagers had a high BLL, but the health team's conclusion was that they were not high-risk casualties. Because the MOPH put the threshold level for chelation intervention rather high and the villagers' blood lead level had not reached the threshold, the health agencies could justify their treatment and claim that chelation therapy was unnecessary. Instead, they could leave it to the villagers to modify their behavior in order to reduce the lead levels in their blood. But, and as alluded to in the introduction, by denying a certain treatment because of an assumption that the body has a higher threshold level of tolerance is to unintentionally support the claims of the lead industry (Millstone 1997; Wing 2000; Ziem and Castleman 2000). It is to suggest that although the victims' bodies were polluted with lead, the human body has a high tolerance rate for this substance and therefore the illnesses and deaths the victims experienced were not connected to pollution.

The behavioral advice that medical personnel give to patients can also work against the evidence needed for justice. For example, the health team gave the villagers behavioral health advice that could have been construed as suggesting another source for their contamination and which would have further shifted the blame away from the mine and on to them. The health team gave the villagers free flip-flops and advised them to wear shoes and limit their movements in the area. From the villagers' point of view, this advice implied that the high lead level in their blood was due to their living in a naturally lead-rich environment and was not necessarily caused by the activities of the mine. The Karen villagers knew that the soil had not contaminated them, as other villagers in the area were unaffected by the natural preponderance of lead in the region. In the initial court hearing, which started in August 2005, the defendants argued along the lines that the villagers' bodies were polluted due to their living in a lead-rich environment rather than toxic lead in the stream. The defendants also tried to explain away the sudden rise in the stream's lead levels as being caused by the impact of heavy rain, which broke the dike of the tailing pond and allowed waste to leach into the stream. For the villagers, what was important was to show that they did have high lead levels and that the mine

rather than the lead-rich environment was the cause. During the hearing the plaintiffs were able to successfully counter both of the defendant's claims with environmental and medical evidence.

The Social Limitations of When the Patient's and Activist's Roles Converge

For environmental-illness activists who suffer from environmental pollution, the roles of activist and patient converge. First, this means that patients who become activists over the cause of their illness form into a protesting group and present themselves as a "group-patient." Hence, the Karen villagers demanded that all those suffering from lead pollution should be given the same treatment. They presented themselves as a group patient and asked that all the group members be treated equally. The notion of a group patient is alien to biomedicine. Second, the group's choice of treatment was determined by social activism. In the Karen case, the supporting NGOs and the media came to have an important say in the villagers' illnesses, which they connected to lead poisoning without much medical evidence. In their "rhetoric of exposure," the villagers' symptoms and deaths were publicly transformed into evidential signs that a wrong had been done. These signs were rhetorically used to contest the medical establishment's approach to their illness. These signs also served as evidence in legal court proceedings. The contestation led the MOPH to go on the defensive and hold a seminar with the aim of scientifically resolving the issue once and for all. The victims' bodies thus became a contested site within the public domain (Das 1996, 274). Third, the convergence of the roles of patient and activist can cause patients to develop an awkward relationship with the doctor. There is a correlation between health and identity through public labeling. Whereas an illness can redefine the person who is afflicted with it, an awkward relationship with the doctor can also provide that person with an identity in the medical interaction. The Karen community of Klity Creek-cum-activists came to be sensationally labeled "the lead-contaminated community," and this also drew the general public to empathize with them. On the other hand, the MOPH and its representatives viewed the ailing patients through the lens of civic activism. For the medics, the villagers' political and civic action was defined as an intrusion into their professional "ownership" (to take a term from Brown [2000, 369]) of the problem. In turn, the Karen community was also labeled by the establishment as being the "NGO community" that followed the advice of non-specialists rather than the professional advice given to them by the government health agencies. Government agencies simply saw the villagers' demands and protests as being generated by the supportive NGO rather than the Karen themselves. This made them a community

of problematic patients who did not want to accept the treatment offered, and their choice of a cure could be dismissed as being irrelevant and originating in non-medical concerns.

The conflation of “patient” and “activist” also enforces an ethos of moral and social pressure on individuals from the afflicted community to stand in support of each other in the public domain. If people from a contaminated community feel politically compelled to demand a specific type of treatment, group activism can delimit the freedom of any individual’s ability to personally choose or accept a treatment that would suit them during the protest period. For example, a couple of years into the protest the health team felt frustrated in maintaining the treatment as the patients/villagers stopped giving their blood for testing. The public demand for chelating drugs to be dispensed to all, rightly or wrongly, prevented some patients/villagers from giving the MOPH treatment a chance. The ongoing demands and public commotion generated by the NGO and media also raised the villagers’ sense of anxiety and perpetuated an impending feeling of doom. Under these conditions it was impossible for the patients/villagers, within their given circumstances, to see the logic behind the therapeutic nature of the treatment the MOPH dispensed, and neither were they able to fully relate to the problems that sometimes accompany the drug treatment they did choose. But what was important for the villagers as civic activists during the initial years of their campaign was to gain official recognition that they were chronic sufferers from lead pollution caused by the lead mine operations in the area and that their illnesses and deaths were symptoms of this. For this they needed official confirmation from the MOPH. Gaining this confirmation was important for the justice they sought. Hence, challenging the treatment the MOPH gave them was seen as necessary.

Conclusion

The Karen of Klity Creek could not have carried out their protest and sought justice without the help of the supporting NGOs. Their adversaries were powerful Thai giants, and they were rural (semi-tribal) non-Thai marginal uplanders. Their sudden protest took the lead company, the medical establishment, and the MPC by surprise. The supportive NGOs made them aware that there was a concerned civil society as well as a legal system that was there to serve them in Thailand and that it was their right to demand justice. The image of the tribal Karen uplanders who were culturally one with the environment but who had been polluted by industry also worked in their favor. The suffering Karen of Klity Creek became a symbol of an environmentally suffering community of *brachachon Thai* (Thai public) whose misery was caused by earlier authoritarian decision

making and the callous management of powerful industry.

The villagers also tried to make the medical establishment come to their aid. It was not just that the villagers found it important to obtain treatment for their lead contamination. While the MOPH did provide villagers with free treatment, the treatment did not confirm that their ailments were connected to their exposure experience. The treatment also seemed to support the mine’s interests. For the villagers, the MOPH’s approach simply trivialized their exposure, and the health advice also seemed to put part of the blame on their shoulders. For this reason they needed a treatment and a cure, one that could not only cleanse their bodies immediately but one that diagnostically confirmed the ultimate source of their illness and deaths. They sought a treatment that confirmed they were victims of industrial pollution and one that could not in any way exonerate the mine from the harm it had caused. The treatment that eight of their members received at the Occupational Medicine and Environment Institute in Bangkok, the very institute that was set up to specialize in the treatment of such medical cases, became the villagers’ treatment of choice. It not only seemed to clean the body of lead—the patients thus treated allegedly recovered from their illnesses—but it confirmed that the villagers had been severely and unjustly poisoned by lead and there could be only one culprit for the source of this contamination. Despite much public contestation and debate, the MOPH did not provide the remaining villagers with the same treatment. What it did do was publicly dispense the drugs of choice to them without supervision through the director of the supporting NGO. It is interesting that once the MOPH dispensed the chelating drugs to the villagers, and even though the drugs were insufficient to go round and were given without any supervision, the villagers stopped this part of their protest and redirected their activism to the legal arena. The villagers saw this act as a symbolic gesture that the state and its health agencies were granting some confirmatory support. The contestation over the treatment the MOPH delivered was more than an issue over remedies and therefore more than a health issue. It was an issue of a moral and legal nature and one that the medical establishment found difficult to relate to. Thus, the villagers’ choice of treatment emerged as, and was determined by, their civic activism.

It is generally recognized today in Thailand that the Karen villagers of downstream Klity were neglected for years before proper medical treatment and justice were made available to them (Human Rights Watch 2014). Theirs was a tragic story for which, in the end and with much effort, they were able to receive a measure of justice from the Thai judicial system; and legally sanctioned total remediation of their stream should now be taking place.

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